

[Document Name] ABSTRACT

A heat exchanger comprises a substantially pillar sheathed heater, a substantially cylindrical case, and a spiral spring. The sheathed heater is accommodated in the case. The spring is
5 provided so as to be wound around an outer peripheral surface of the sheathed heater. Thus, a spiral flow path is formed among an outer peripheral surface of the sheathed heater, an inner peripheral surface of the case, and the spring. The spring functions as a flow velocity conversion mechanism, a turbulent
10 flow generation mechanism, a flow direction conversion mechanism, and an impurity removal mechanism. A water inlet and a water outlet are respectively arranged at positions eccentric from a central axis of the case on a side surface of the case.